

## MODIS IOT Weekly Report

Mission Operations Days: 2001/055 to 2001/061

February 23, 2001 20:00:00 GMT to March 2, 2001 20:00:00 GMT

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NOTE: The Solar Diffuser sector size was changed from 50 frames to 5 frames and the SRCA sector size was changed from 10 frames to 55 frames from 061/14:06:30 to 061/18:21:56. The SCIABNORM flag was set from 061/14:04:50 to 061/ 18:35:25.

NOTE: The SRCA sector delay was left at a value of 50 (1 frame delay) after the SRCA activities on Friday March 2<sup>nd</sup>, (day 061). This delay will be changed back to zero on Monday, March 5<sup>th</sup>

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### Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in B-side Science Mode

Blackbody	A Off; B On	Nominal
Calibration Electronics	A Off; B On	Nominal
Control Processor	A Off; B On	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A Off; B On	Nominal
FDDI Port	A On; B Off	Nominal
FIFO Memory	1 & 2 Off; 3 & 4 On	Nominal
Format Processor	A Off; B On	SRCA sector delay of 50
Power Supply: 1	Off	Nominal
2	On	Nominal
PV FPAs: VIS	A Off; B On	Nominal
NIR	A Off; B On	Nominal
SMIR	A Off; B On	Nominal
LWIR	A Off; B On	Nominal
PC FPA: LWIR	A Off; B On	Nominal
Radiative Cooler:		
Outgas Heaters	All Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A Off; B On	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal

Timing Generator	A Off; B On	Nominal
Flight Software	Rev BD + 2 patches	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	68	Nominal

This Week's Completed MODIS Activities:

Saturday, February 24, 2001  
None

Sunday, February 25, 2001  
None

Monday, February 26, 2001

057/16:15:10 ATC Moved Formatter to Night from 15:44:39 to 16:15:10 to gather approx. 30 minutes of day rate data over groundtrack night

Tuesday, February 27, 2001  
None

Wednesday, February 28, 2001  
059/21:07:13 ATC OA-16: SDSM Screened  
059/22:46:05 ATC OA-15: SDSM Open

Thursday, March 1, 2001  
060/00:41 Real-time Set Inhibit Ids 33 (CP) & 54 (SRCA)

Friday, March 2, 2001

061/14:04:50	Real-time	Set SCIABNORM flag to ABNORM
061/14:06:30	Real-time	Loaded new table #7, sector size definitions, SD=5, SRCA = 55
061/14:07:20	Real-time	Loaded FSW patch to set SD frames to 5 and SRCA frames to 55
061/14:09:30	Real-time	Loaded new table #8, sector start definition to center SRCA 55 frames over nominal 10 frame sector
061/14:09:30	Real-time	Dumped new table #7, sector size definitions, SD=5, SRCA = 55
061/14:10:55	Real-time	Dumped FSW patch to set SD frames to 5 and SRCA frames to 55
061/14:12:08	Real-time	Dumped new table #8, sector start definition to center SRCA 55
061/15:11:44	Real-time	Clear inhibit ID #33 (CP)
061/15:12:23	Real-time	Clear inhibit ID #54 (SRCA)
061/15:23:06 – 15:54:40		ATC SRCA Crosstalk test Part I
061/16:49:59 – 17:33:34		ATC SRCA Crosstalk test Part II
061/18:20:25	Real-time	Loaded launch table #7, sector size definitions, SD=50, SRCA =

061/18:21:11	Real-time	Loaded FSW patch to set SD frames to 50 and SRCA frames to 10
061/18:21:56	Real-time	Loaded launch table #8, nominal sector start definitions
061/18:22:57	Real-time	Dumped launch table #7, sector size definitions, SD=5, SRCA =
55		
061/18:23:52	Real-time	Dumped FSW patch to set SD frames to 50 and SRCA frames to
10		
061/18:25:07	Real-time	Dumped launch table #8, nominal sector start definitions
061/18:35:25	Real-time	Set SCIABNORM flag to NORM

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Saturday, March 3, 2001

None

Sunday, March 4, 2001

None

Monday, March 5, 2001

064/????	Real-time	Set SRCA sector delay to zero
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Tuesday, March 6, 2001

None

Wednesday, March 7, 2001

None

Thursday, March 8, 2001

None

Friday, March 9, 2001

None

Maneuvers:

The next MODIS Roll Maneuver for a Lunar Calibration through the Space View Port is scheduled for March 13<sup>th</sup> at approx. 21:32:52. The next Drag Makeup Maneuver (delta-V) is scheduled for March 14<sup>th</sup> at approx. 19:40:00

### MODIS Anomalies:

There appears to be a problem processing the science data collected during the SRCA activities on Friday, March 2<sup>nd</sup>, 2001 (day 061). Specifically, this may be related to the change in sector sizes for the Solar Diffuser and SRCA. If this is the cause, it will affect data from 061/14:06:30 to 061/18:21:56 GMT. This problem is not yet well understood.

The SRCA sector delay was left at a value of 50 (1 frame delay) after the SRCA activities on Friday March 2<sup>nd</sup>, (day 061). This delay will be changed back to zero on Monday, March 5<sup>th</sup>. This has no impact to MODIS operations except for SRCA sector data. No SRCA activities will be scheduled until the delay is set to zero. The SRCA crosstalk activities will be corrected and re-CM'd.

### General Instrument Comments:

MODIS is in Science Mode on the B-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches (FRFSP).

### MODIS Telemetry Trends:

Temperature trends are correlating with the solar beta angle.

### Non-MODIS Significant Events:

None

### Limited Life Item Status:

SRCA 10W Lamp #1: 182.0 of 500 hours  
SRCA 10W Lamp #2: 140.7 of 500 hours  
SRCA 10W Lamp #3: 149.9 of 500 hours  
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 556.9 of 4000 hours  
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1543 of 3022 Movements  
Nadir Aperture Door: 532 of 1316 Movements  
Space View Door: 437 of 1316 Movements